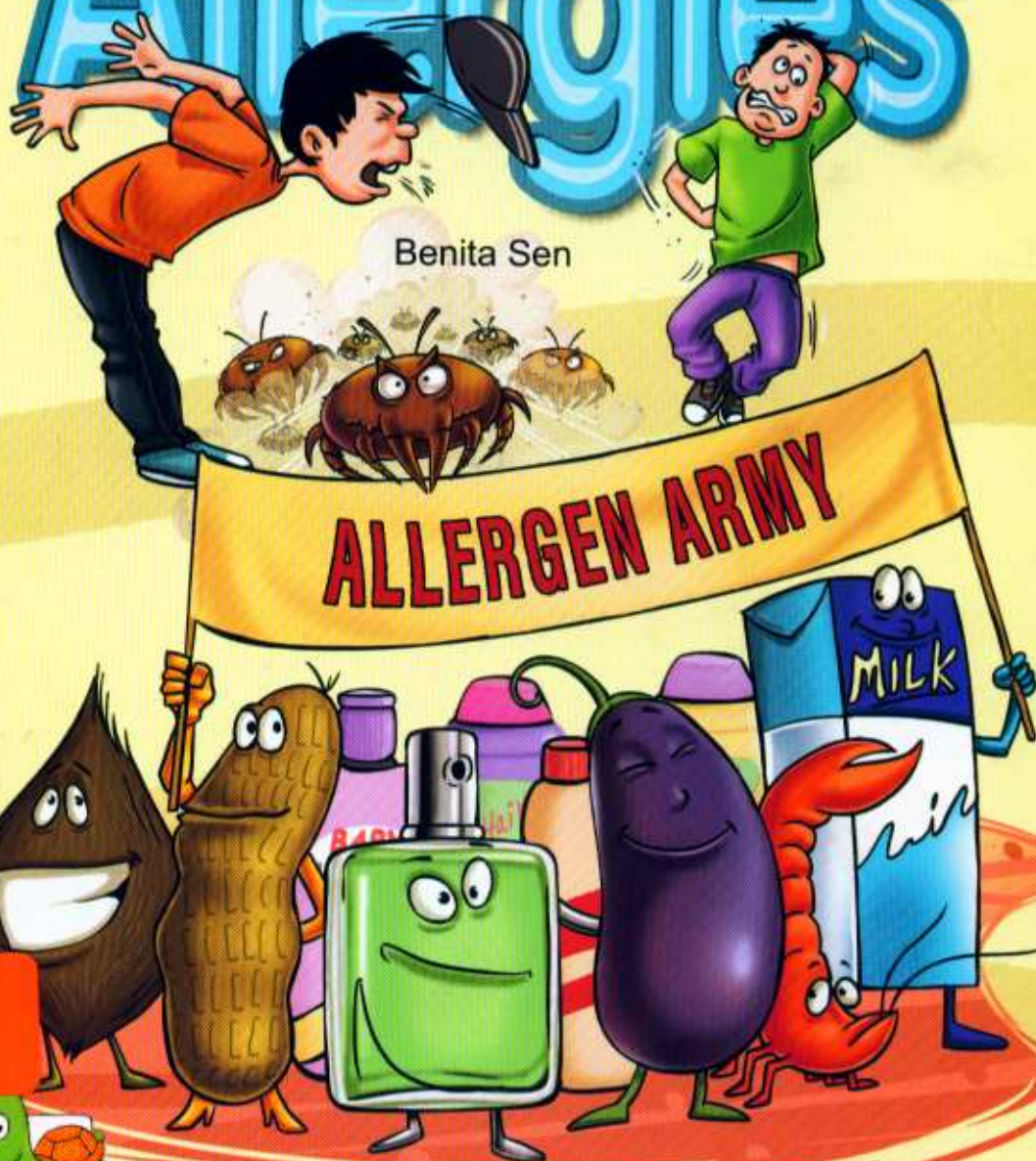


Get Well Soon

Allergies

Benita Sen



A note by Dr R K Pachauri

Human beings have made great progress in recent years. We have been able to produce a large number of goods and services on a huge scale, and have utilized technology in a wide range of activities. However, all this has come at an increasing cost which has often remained concealed or ignored. Our bodies of water have been polluted. The air around us has a large amount of particulate matter and gases that are not only harmful for our health but also affect the climate of the earth. Overall, we have neglected to take care of planet earth which is home to all of us and all other living species.

Economic development is meant to ensure a higher level of human welfare in this generation as well as for others yet to come. But we know from everything we see around us that water borne and air pollution related diseases are increasing. We can conclude that while we try to give our children a better life, we also harm their health in actual fact.

This series takes a look at some of the common ailments children suffer from, such as stomach problems, allergies, injuries, and fever. While these are all part of growing up, they are becoming a cause of concern, to both parents and their children, primarily because pollution has aggravated these maladies. The books not only focus on the science behind the causes of these ailments; they also point out ways to avoid them. Above all, the objective is to take the scary element out of these common maladies and ensure that the growing-up years are full of fun. Those who read these books would learn how to lead healthy and happy lives.



R K Pachauri

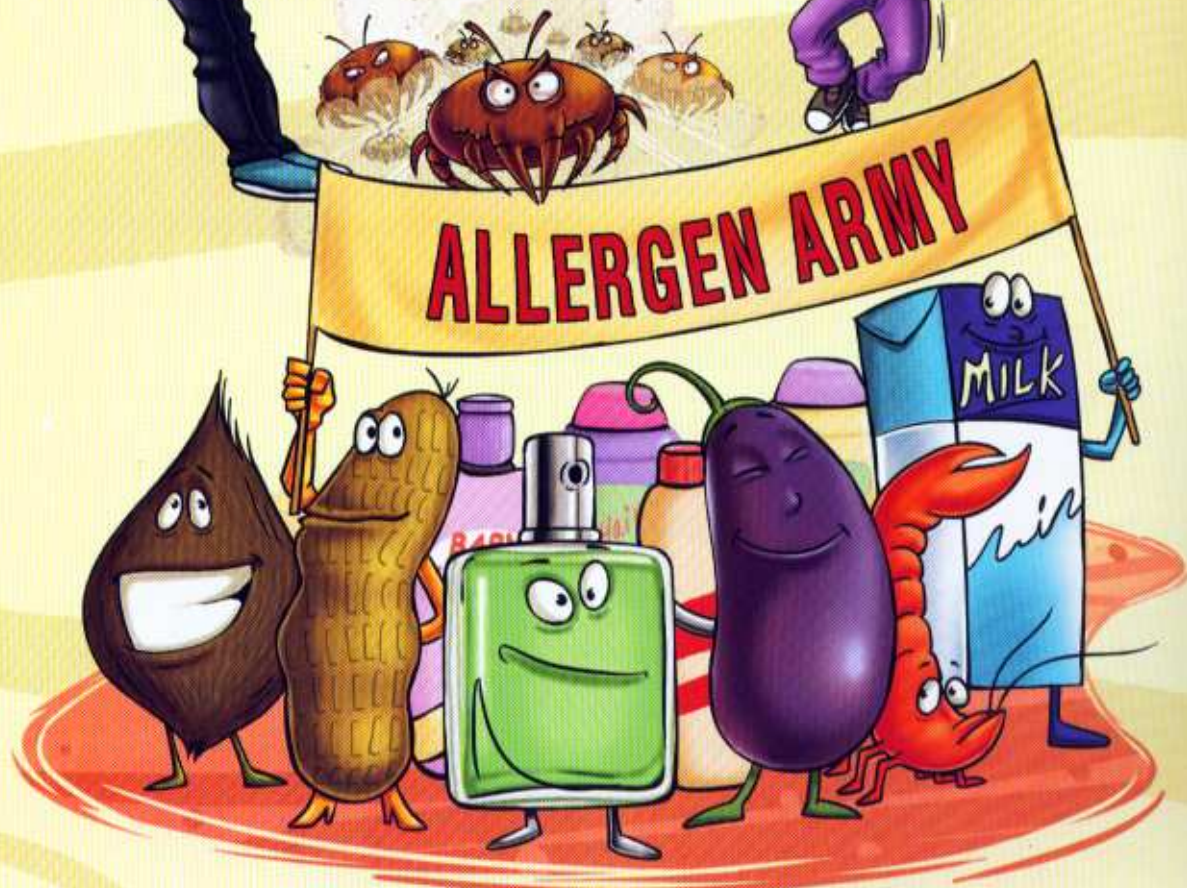
Director-General, TERI

Chairman, Intergovernmental Panel on Climate Change

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The Energy and Resources Institute



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Disclaimer: This book has been reviewed by a medical practitioner and is meant for general educational purposes only. It should not be considered as a substitute for medical advice. The information provided in this book should not be relied upon to make decisions about a child's health. The family doctor should always be consulted about individual condition(s) and/or circumstances.

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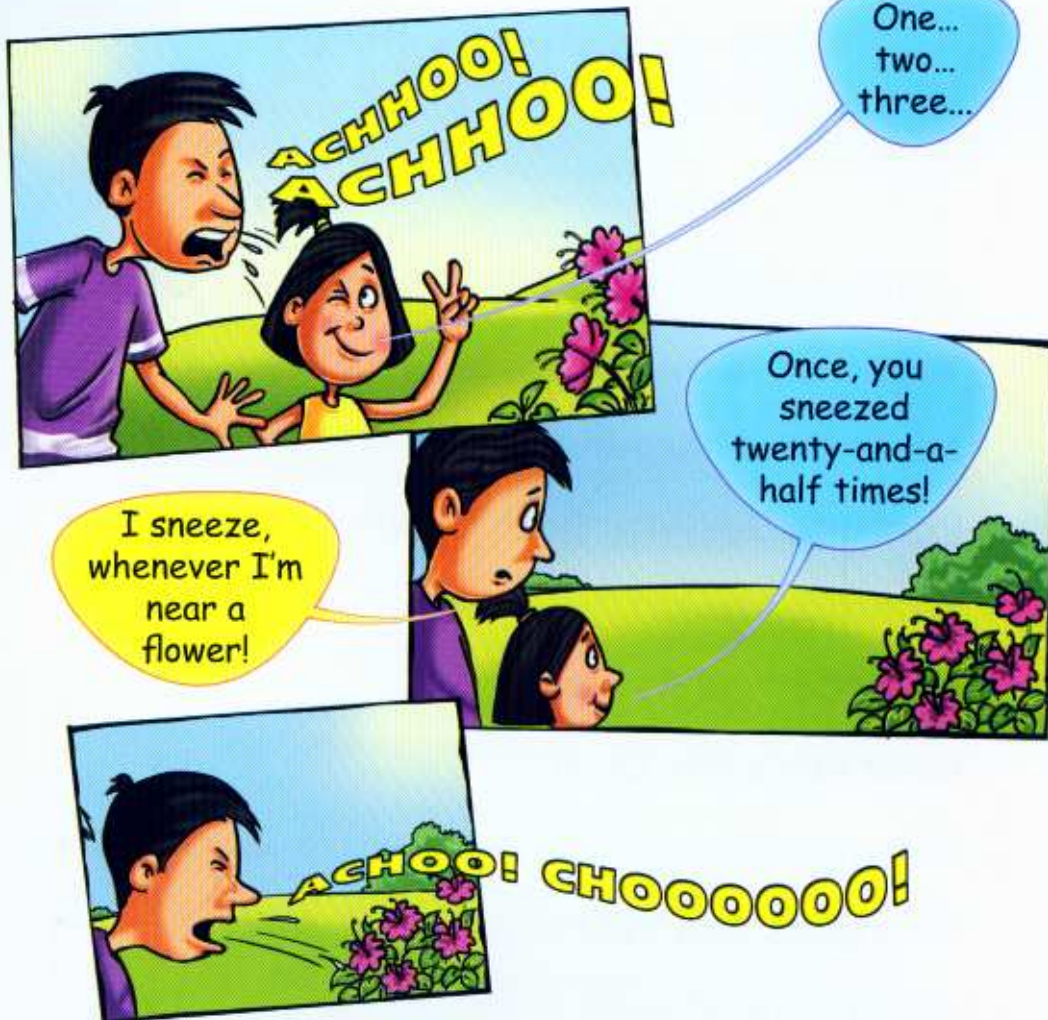


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ACHHOO! ITCH! SCRATCH! COUGH!



"Achhooo! Excuse me."

Are these the first words you begin the day with? Does your skin feel itchy if you eat sweets made of coconut? Do you go 'cough-cough-cough' when your teacher asks you to rub the board and chalk dust flies around? Does the smell of a freshly painted cupboard give you sniffles and a painful lump in your throat?

ALLERGY ALERT

Heard the saying, "One man's meat is another man's poison"? It means what suits one person may not suit another. Things you are allergic to may not affect even your brother or sister. For example, the peanuts that make you sick could be your sister's favourite food!

Paints have chemicals that can cause breathing trouble.



Chalk dust can cause throat problems and skin allergy in some children.



ACTION REACTION

I love to eat pumpkin,
But it makes me scratchy.
Pumpkin doesn't like me.
It makes my skin patchy!



Prawn allergy is a common food allergy.

If any of these sounds like you, chances are, you have an allergy. An allergy is your body's way of telling you what it does not like. In other words, your body is 'allergic' to something. Anything that causes an allergy, like dust, is called an allergen.

Your body's immune system, which fights germs to keep you healthy, does not like allergens. So, as soon as an allergen enters your body, a battle begins. That is what doctors call an allergy.

YUP, THAT IS AN ALLERGY!



Severe skin itching is called pruritus.



Different allergens make different people react differently.

SNIFFLE PIFFLE: If you suddenly get a runny nose for no reason at all, it could be an allergy.

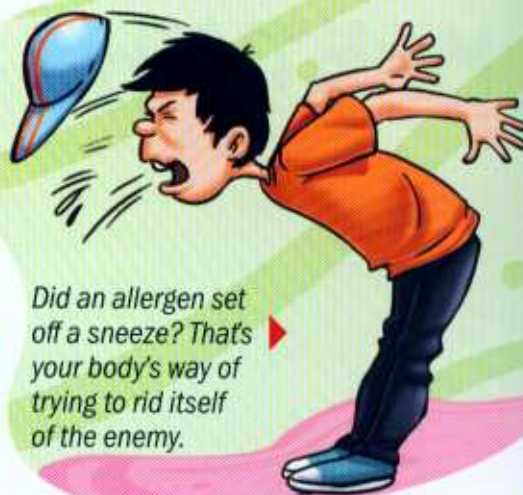
ACHHOO ATTACK: Some people begin their day with a series of loud sneezes. Sometimes, they sneeze dozens of times at any time of the day whenever they bump into an allergen.

BRASH RASH: Some allergies show up as pink, itchy patches on the skin. When the way your skin looks or feels changes and red patches show up,



ACTION REACTION

Itchy, sneezy, coughy, wheezy.
My nose is blocked and stuffed.
Rashy, splotchy, pinky, blotchy,
I think I've itched enough!



Did an allergen set off a sneeze? That's your body's way of trying to rid itself of the enemy.

doctors call it a rash. Sometimes, the patches can work their way up into small bumps. This pink, bumpy rash caused by an allergen is called hives, or urticaria. If the attack is serious, it can cause a skin problem called eczema. That is when a number of round patches appear on your skin.

LOOEY-POOEY: A sudden stomach cramp and a sudden urge to pass loose stool after a meal? Feel like throwing up? You probably ate an allergen!

MY, LOOK AT YOUR EYE: Itchy, pink eyes and scratchy ears? You know who's here!

WHEE-ZEY? TO THE DOC, PLEASEY: Sometimes, allergens can mean serious trouble like breathing problems or may even cause death, if it is not treated in time!

Whatever the sign, if you, your parents, or your teachers think you have an allergy attack, it is best to see a doctor right away.

ALLERGY ALERT

The word 'allergy' comes from the Greek words 'allos', which means 'other', and 'ergon', which means 'work'.



Eye allergies are often related to other allergies like hay fever.

MEET THE ALLERGENS



You do not have to look too far for allergens. They are almost everywhere!

- Eating vegetables like brinjal, especially those with a lot of seeds, mushrooms, and taro or colocasia ('arbi' in Hindi) can leave some people with an itchy palate (roof of the mouth).
- Many people are allergic to seafood. Their skin may break out into an itchy, pink rash. Sometimes, they even throw up soon after they eat prawns and lobsters.
- Milk, eggs, nuts, wheat, soya, coconuts, and even honey can make you uncomfortable or sick if you are allergic to them.

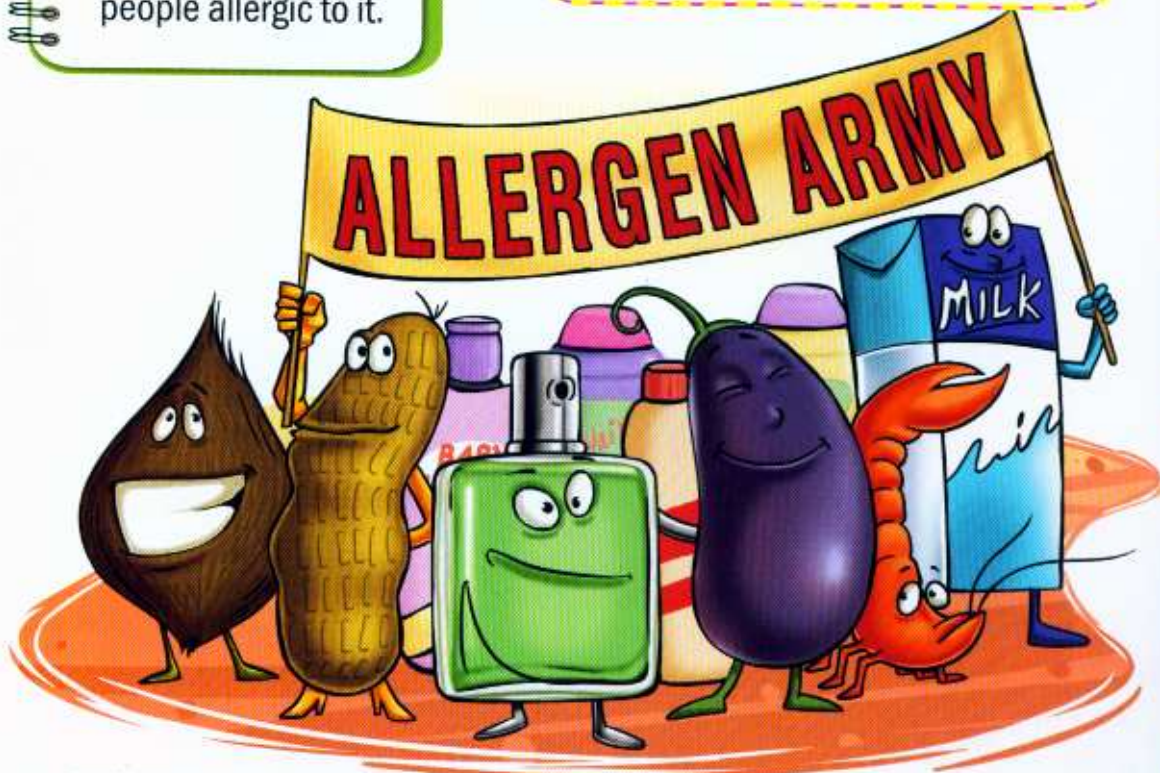
ALLERGY ALERT

Not all medicines are good for you. Instead of curing, medicines like penicillin can set off an allergy in people allergic to it.



ACTION REACTION

Tiny little enemies
In food, water, and air.
I'm not too worried,
Though allergens are everywhere.



- Pollen, which looks like powder, and is found in grass and flowers, can set you sneezing if it enters your nose. When you are allergic to pollen, doctors say you have hay fever.
- Teeny-weeny dust mites that hide in the dust around your home, can set off allergies.
- Tiny fungi (many a fungus) can trigger off an allergy.
- Stings of insects like bees and wasps contain poison that many people are allergic to.
- Hair and fur of pet cats and dogs can cause allergies.
- Some people are also allergic to chemicals in petrol, perfumes, smoke, or paint.

IMMUNE SYSTEM: BODY'S GUARD



All through the day and night, even while you are fast asleep, your body defends itself against invading germs. The immune system is the body's army against its enemies.

The immune system is not something that can be seen like your ear or felt such as your heartbeat. It is made up of different parts of your body, like white blood cells (also known as leucocytes) and organs like the spleen. All of these work together.

ALLERGY ALERT

What your doctor calls 'immunizations' are the same as the injections you take to keep illnesses like measles and mumps away. Also known as 'inoculation', it helps your body become stronger against many diseases.

ACTION REACTION

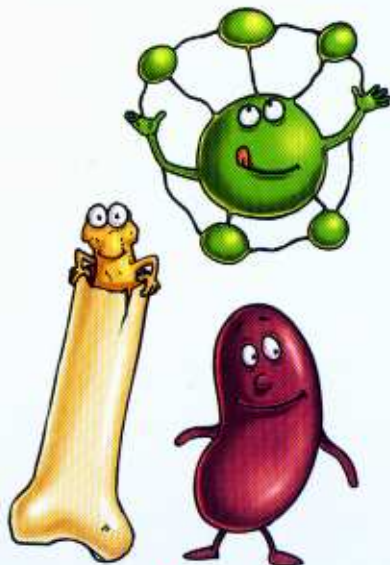
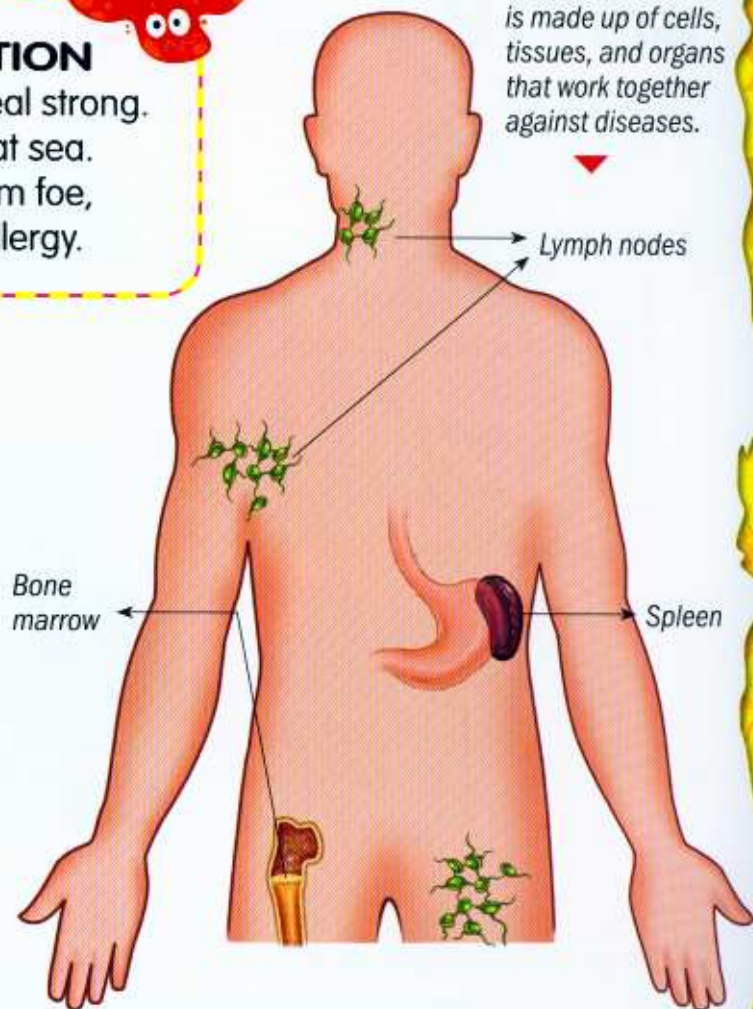
My immune system's real strong.
But sometimes, it's at sea.
It can't tell friend from foe,
And gives me an allergy.

The spleen filters blood and fights infections that attack you. Leucocytes kill germs that cause various diseases.

But sometimes, the immune system is not strong enough to keep you from falling ill.

This can happen if your body is weak or

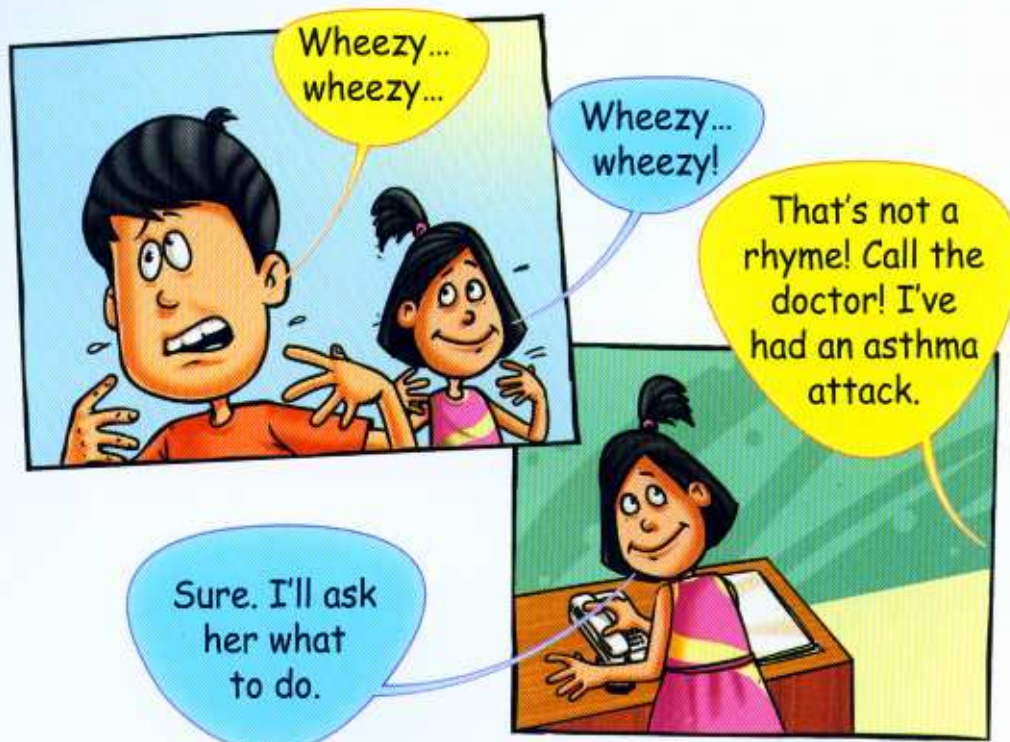
The immune system is made up of cells, tissues, and organs that work together against diseases.



Leucocytes are found in the lymph nodes, spleen, and bone marrow.

when you are suffering from some other medical problem. But once the immune system starts working properly again, you can get well soon. In some people, the immune system acts strangely. It mistakes something safe, like strawberries, as the body's enemy and launches an attack. When these people eat strawberries, they have an allergic reaction like sneezing and swelling of the body.

ASTHMA ATTACK!



Allergens can make it difficult for some people to breathe. They attack the breathing tubes that let air travel from the mouth or nose, down the windpipe (also called trachea) into the lungs. Many people suffer from a nasty lung disease called asthma. They have breathing tubes that are more easily affected by allergens than others'. When an allergen attacks the air tubes, these pipes swell out and become narrow. So, less air can pass through them either to or out of the lungs.



ACTION REACTION

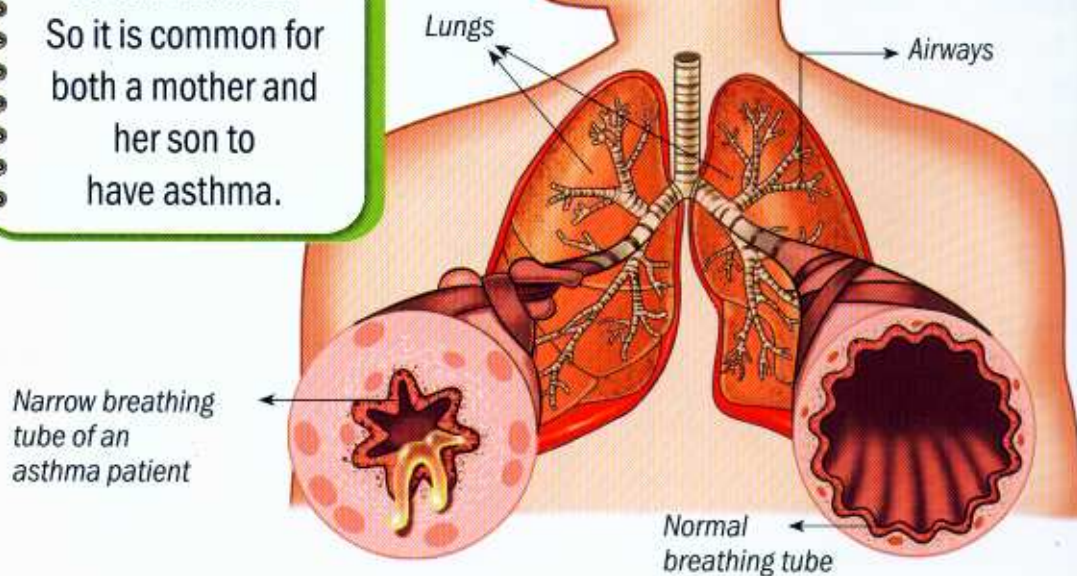
Asthma isn't a bug,
But it does make you wheeze.
So carry your asthma medicines,
Wherever you go, please!



ALLERGY ALERT

Asthma is not infectious, but it is often found in certain families. So it is common for both a mother and her son to have asthma.

Asthma is a lung disease that can make breathing difficult.



Most people with asthma are allergic to dust mites. These are really tiny creatures found in dust. Some people may be allergic to dander, which are bits of dead skin that attach to the fur of animals like dogs and cats.

Just one gram of dust can contain 1,000 dust mites!



Even sharp smells like perfume can set off an asthma attack. Sometimes, smoke too can trigger off an attack of asthma. It is true that people with allergies are more likely to suffer from asthma but remember, not all asthma attacks are caused by allergens.

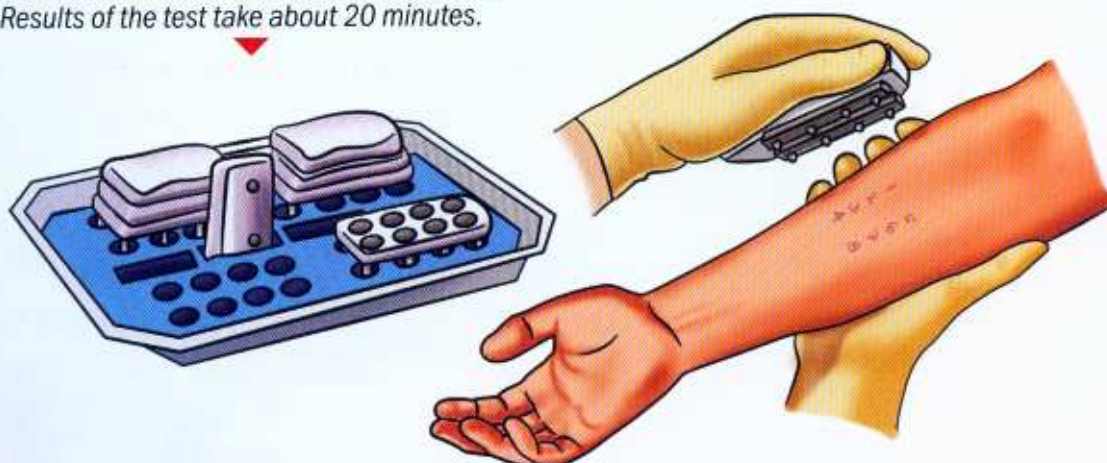


HERE COMES THE DOC!



Sometimes, it is easy to find the enemy behind an allergy attack. The doctor may ask your parents what you ate, and then point a finger at a food that made you ill earlier.

*Skin prick test is a common test for allergies.
Results of the test take about 20 minutes.*



ALLERGY ALERT

Some people are allergic to leather. Their skin turns red and starts to itch as soon as they wear gloves, boots or anything else made of leather. Doctors call this latex allergy.



Skin Prick Test

1. A drop of a liquid containing an allergen is first put on the skin.
2. If a red, swollen, itchy area (called a wheal) appears, the test is positive.

But often, it is not that easy. Then, your doctor may ask you to see another doctor, called an allergy specialist, or an allergist. This doctor will ask you to take an allergy test to find out what you are allergic to.

By studying your blood, the doctor can tell what sets off the allergy alarm. Sometimes, she can ask for a skin prick test. Drops of liquid mixed with what you ate are put on your skin. Then, the skin is lightly pricked. If the spot becomes itchy, red, and puffs out into a rash, it means you are allergic. You could also have a patch test done. A liquid with common allergens like rubber or tobacco are rubbed on a patch on to your back. If the patch turns red and itchy, the doctor can pinpoint the allergen.

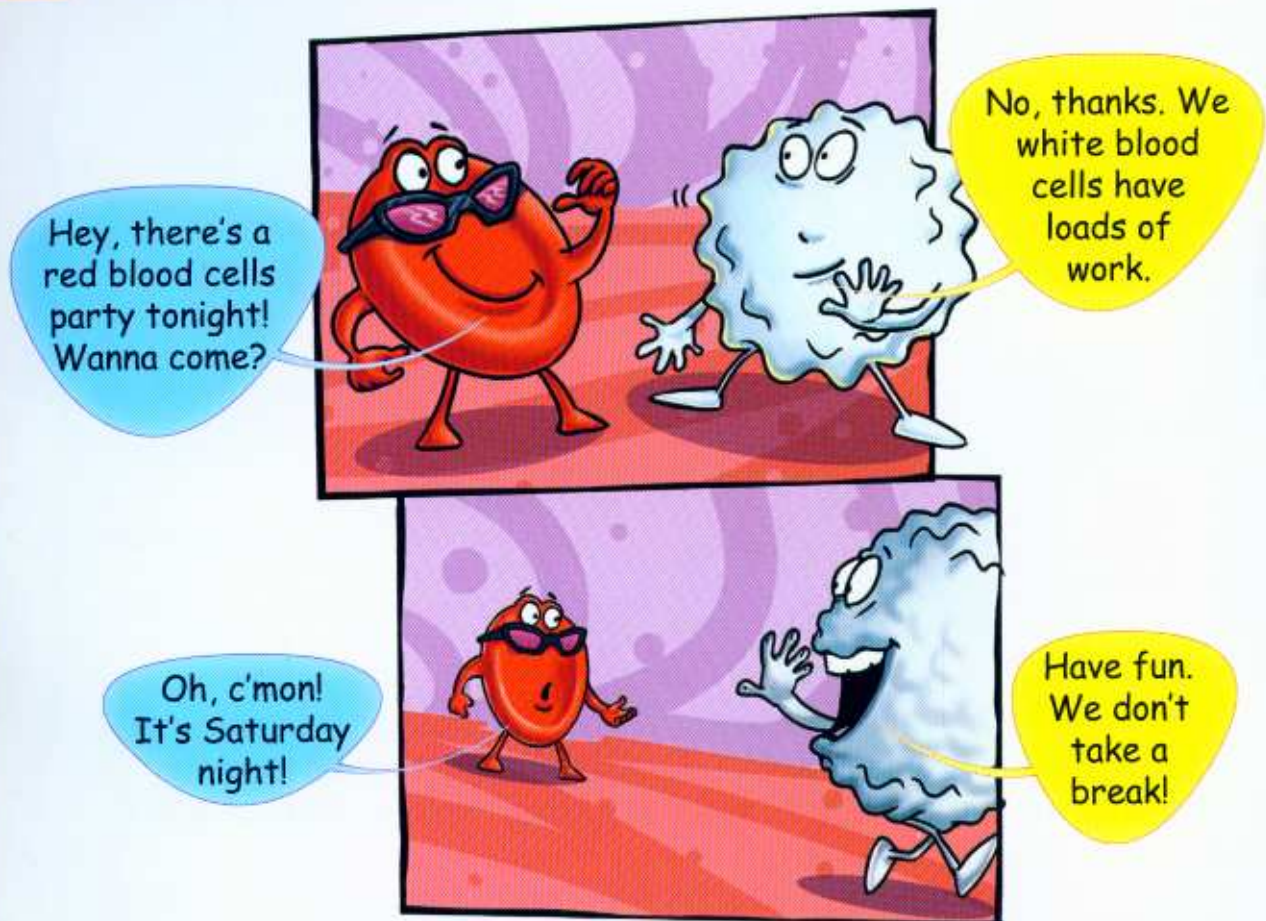


ACTION REACTION

Is it the egg? Is it milk? I'm keeping a food diary. We'll soon catch the culprit, and I'll be allergy-free.



BEAT BACK THE BUG!



All allergies should be reported to a doctor. Does that sound scary? Do not worry! Your immune system is strong enough to beat back many allergies. Most of the time, you might not even remember the early morning sneezing bout by the time you get ready for school! But if the itchy rashes continue or if you find it difficult to breathe, there is no time to lose. It is time to visit the doctor.

Most of the time, the doctor will ask you to take a tablet called an anti-allergic.

'Anti' means 'against', or 'opposite'. So an anti-allergic medicine fights against whatever causes an allergy. But if the allergy looks serious, she may even give you an injection because it will work faster.



ACTION REACTION

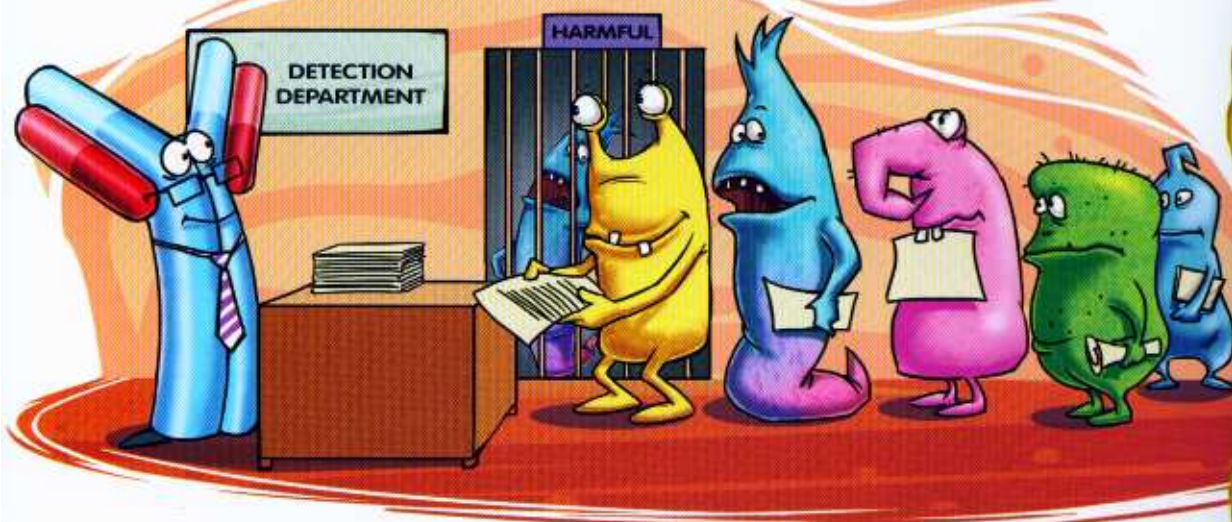
Will it go on its own?
Will I need to take a pill?
The doctor will decide for me,
And I'll be well and chill.



An antibody is a protein, whose job is to detect harmful bacteria, fungi, and viruses.

ALLERGY ALERT

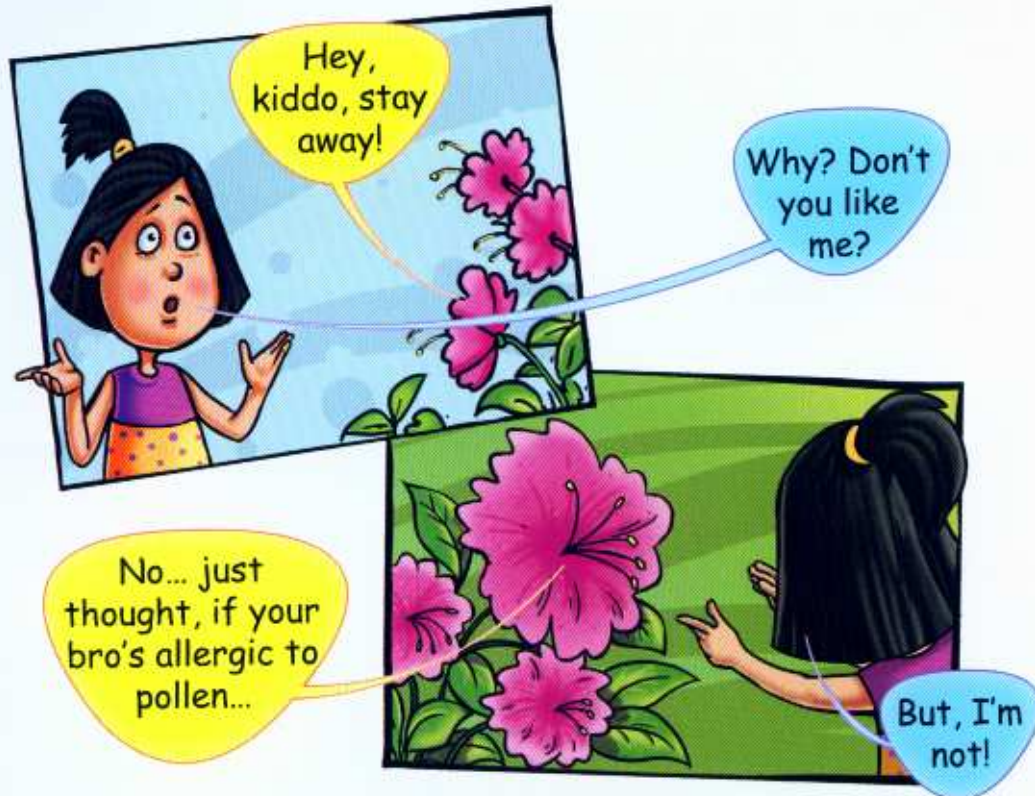
Our immune system produces antibodies, whose job is to recognize germs that cause infection. The antibody for allergies is called Immunoglobulin E or IgE in short.



Some people can be allergic to a particular food all their life. It can be milk, eggs, rice, soy, prawns, wheat, peanuts, and so on. Food allergies may not need a medicine unless the allergy attack is serious. The doctor will simply ask you to avoid the food you are allergic to. That may be difficult, since some of us are allergic to milk, wheat, and rice, which are common foods, but it is worth trying, isn't it? A good idea is to always read the list of ingredients on food and drink packets or cans to be sure these do not contain what you are allergic to.



STRANGE ALLERGIES



People are allergic to all sorts of things. This list of allergies may surprise you!

Some people start to sneeze when they suddenly step into bright light. The scientific name for this allergy is Autosomal Dominant Compelling Helioophthalmic Outburst Syndrome. It is such a long and difficult name that doctors take the first letters of some of the words and call it ACHOO Syndrome (syndrome is a group of signs that tells the doctor you have a particular disease).

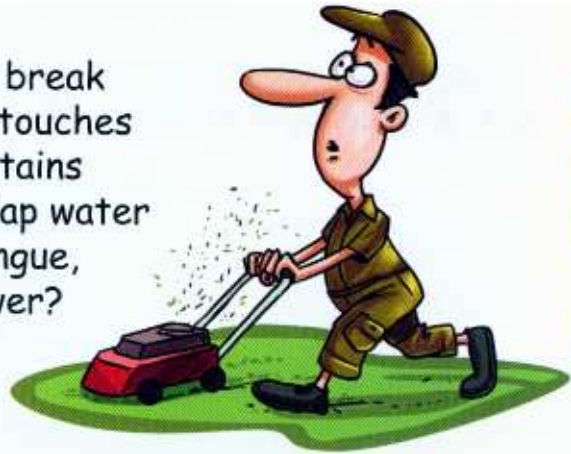
ALLERGY ALERT

The word 'urticaria' comes from the Latin words 'urtica', which means 'nettle', and 'urere', which means, 'to burn'. Nettle is a hairy plant that will make you itch when you touch it.

Those who have water urticaria break out in hives soon after their skin touches water, especially if the water contains chemicals like chlorine. Drinking tap water can cause the allergic person's tongue, lips, and throat to swell. The answer? Drinking bottled water.

Vibrations of an electric lawnmower can set off an allergy attack. Strange, isn't it? The body mistakes the vibrations for an enemy attack and sets off the alarm, spotting the skin with hives.

If you see someone out in the sun wearing a wide-brimmed hat and sunglasses, chances are, the person has solar urticaria. Going out in the sun makes them break out in a rash.



Sometimes, a lawnmower kicks up pollen, and gives you an itchy time.



ACTION REACTION

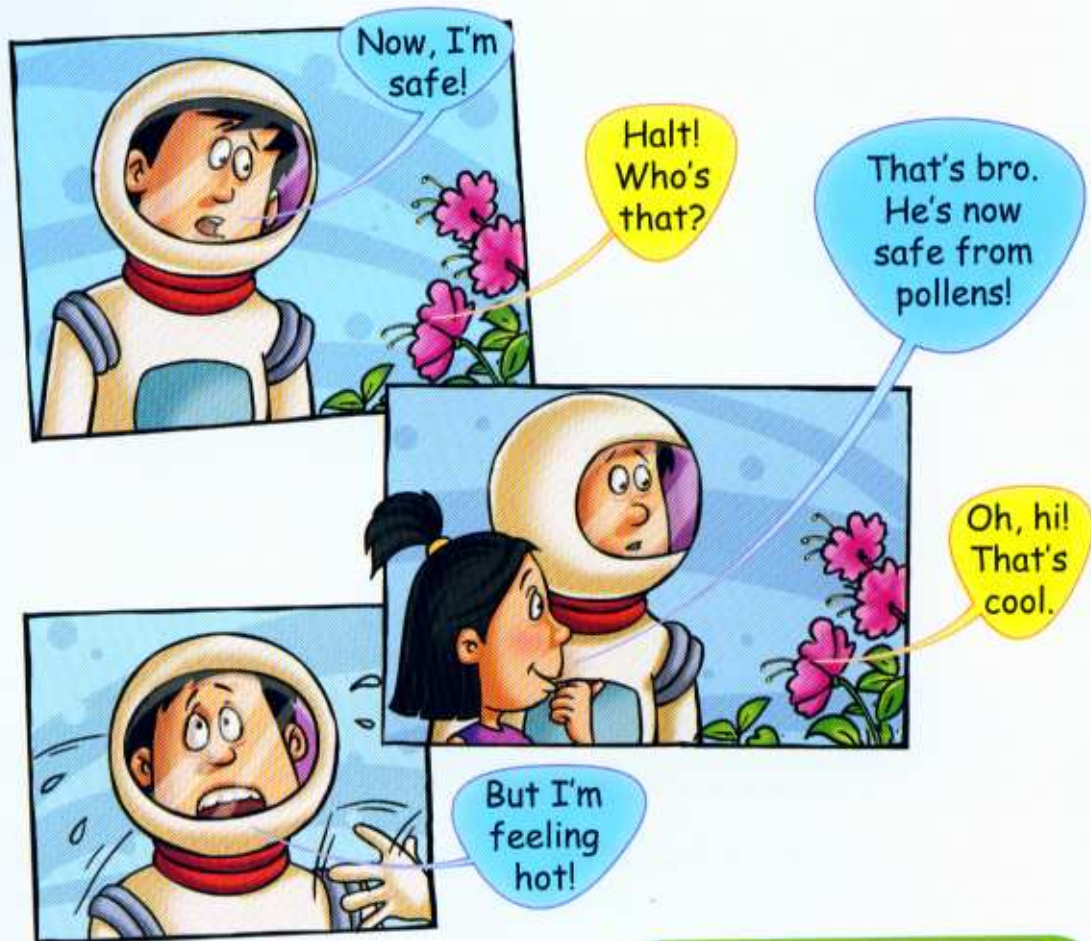
Many things can trigger an allergy,
Any time, any place, and then,
If so many things are guilty,
Beware of an allergen!



Chlorine keeps the water in a swimming pool clean, but can keep you off the water if you have chlorine allergy.



ALLERGIES, OUT YOU GO!



Since you cannot do much to control your immune system, the best way to prevent an allergy is to avoid the allergen. You can keep away from food allergies if you are careful about what you put into your mouth. If you are allergic to dust, make sure you are not in a room when it is being cleaned. If you must dust your room, cover your nose and

ALLERGY ALERT

An allergy can stop as suddenly as it began. Some children who are allergic to say, milk, may guzzle glasses of milk when they grow up. This just shows that the immune system often makes peace with an allergen.

- Usually, staying away from an allergen is good enough to avoid getting an allergy.
- If you are allergic to pets, the best thing to do is to keep them away from your bedroom.
- Washing your bedsheets and blankets in boiling water will remove all dust mites.
- Find out the ingredients that are written on the packet or jar containing food. It will help you understand if eating what is inside is a good idea or not.
- Most allergies go away on their own as you grow up. However, some, like allergies to nuts, brinjal, and seafood trouble you for the rest of your life.



ACTION REACTION

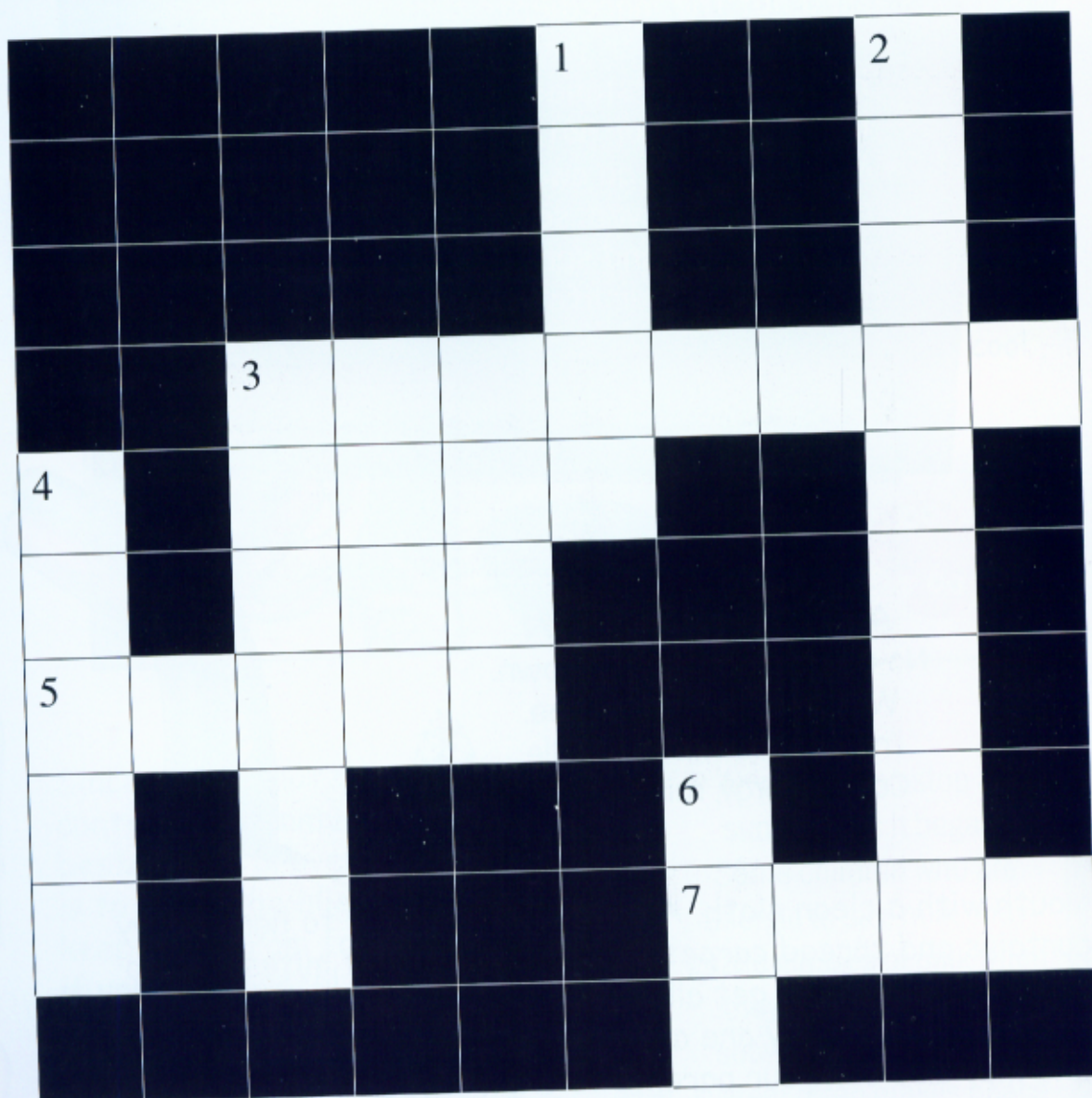
No allergen can get me down.
With some help I'll be fine.
I'm going to win this battle,
Come allergy, rain or shine!



mouth with a clean cloth. Ask your parents not to hang heavy curtains and spread carpets in your room. Dust mites love to hide in them! If you get allergy attacks suddenly, the doctor may ask you to carry one anti-allergic tablet with you always. She may also ask your parents to explain your allergy and the medicine you need to your school teachers, so that you can get help fast.



WHAT'S THE WORD?



CLUES

Across

3. Anything that you are allergic to (8 letters)
5. This syndrome makes you sneezy! (5 letters)
7. This word means 'Opposite' (4 letters)

Down

1. Those red bumps (5 letters)
2. Allergy doc (9 letters)
3. Breathing problem sometimes caused by allergy (6 letters)
4. Pollen from this can cause an allergy (5 letters)
6. This fever isn't really a fever (3 letters)



ANSWERS:

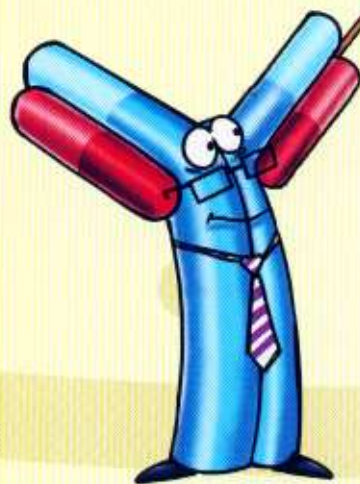
WORDS TO REMEMBER



- Antibodies: tiny particles produced by your body's immune system that fight harmful bacteria and viruses
- Dander: dandruff-like dead skin found on animals, which drops off on its own
- Immune system: a system consisting of special cells, tissues, and organs that protects your body against harmful bacteria and viruses
- Pollen: powder-like substance found in flowers, grasses, and plants
- Rash: change in the way your skin looks and feels
- Windpipe: also called trachea, it's a tube that connects our nose and mouth to the lungs



This is a
GREEN
book



Allergies



Ever wondered why some of your friends start sneezing when they go near flowers? Or why some of your classmates cough while wiping the blackboard?

What makes some of us itch when we get into a chlorinated swimming pool? The cause is an allergy. But what is an allergy? Why does it happen? Filled with answers to such questions, this book introduces you to naughty allergens and how antibodies fight back. It tells you how different parts of your body take on an allergy. It also helps you understand what you can do to keep those nasty sneezes, itches, and coughs away.

Other books in this series

Fever

Injuries

Stomach Problems

Ages: 6-8

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